

Claims

We claim:

- 1 1. A method for using special comment language to augment
2 functionality of a program language architecture, the method
3 comprising the steps of:
 - 4 reading from a storage media, a program listing for
5 performing a basic function in a first executer;
 - 6 detecting in said program listing, a special comment
7 identifier by analyzing a standard comment statement in said
8 program listing;
 - 9 interpreting contents of said standard comment statement as
10 a special comment language statement when said special comment
11 identifier is detected in said standard comment statement; and,
12 performing said basic function and an optional function
13 according to said special comment language statement in a second
14 executer.
- 1 2. The method according to claim 1 wherein said special comment
2 identifier comprises a predetermined field left justified in a
3 standard comment format.
- 1 3. The method according to claim 1 wherein said special comment
2 identifier comprises a predetermined field right justified in a
3 standard comment format.
- 1 4. The method according to claim 1 wherein said special comment
2 identifier comprises a physical location in said program listing.
- 1 5. The method according to claim 1 wherein said special comment
2 language statement is context sensitive.

1 6. The method according to claim 1 wherein said function
2 comprises definition of a variable.

1 7. The method according to claim 1 wherein said function is
2 simulation environment criteria.

1 8. The method according to claim 1 wherein said function is
2 specification of type.

1 9. A method for assisting a user in editing a program wherein
2 said programming environment supports special comment language to
3 augment functionality of a program language architecture, the
4 method comprising the steps of:

5 analyzing in a program listing, a programming statement
6 entered by said user to determine if an optional special comment
7 language function exists for said programming statement;

8 determining if said optional special comment language
9 function should be added to said program listing; and,

10 adding said optional special comment to said program
11 listing.

11 10. The method according to claim 9 wherein said determining step
12 comprises the further step of displaying a representation of said
3 optional special comment language function to allow said user to
4 select a special comment indicating said special language
5 function to be added said program listing.

11 11. The method according to claim 10 wherein said displaying
12 step comprises a separate window concurrently displayed with a
3 previous window.

11 12. The method according to claim 10 comprising the further step
12 of selectively displaying a help assistant message for said

3 representation of said optional special comment language
4 function.

1 13. The method according to claim 10 wherein said representation
2 of said optional special comment language function comprises a
3 graphical image.

1 14. The method according to claim 9 further comprising the step
2 of highlighting a portion of said program listing wherein said
3 portion comprises said programming statement.

1 15. The method according to claim 9 wherein said analyzing step
2 further comprises analyzing the context of said programming
3 statement in relationship to said program listing.

1 16. The method according to claim 9 wherein said optional
2 special comment comprises a specification of type.

1 17. A system for using special comment language to augment
2 functionality of a program language architecture, the system
3 comprising:

4 means for reading from a storage media, a program listing
5 for performing a basic function in a first executer;

6 means for detecting in said program listing, a special
7 comment identifier by analyzing a standard comment statement in
8 said program listing;

9 means for interpreting contents of said standard comment
10 statement as a special comment language statement when said
11 special comment identifier is detected in said standard comment
12 statement; and,

13 means for performing said basic function and an optional
14 function according to said special comment language statement in
15 a second executer.

1 18. The system according to claim 17 wherein said special comment
2 identifier comprises a predetermined field left justified in a
3 standard comment format.

1 19. The system according to claim 17 wherein said special comment
2 identifier comprises a predetermined field right justified in a
3 standard comment format.

1 20. The system according to claim 17 wherein said special
2 comment identifier comprises a physical location in said program
3 listing.

1 21. The system according to claim 17 wherein said special
2 comment language statement is context sensitive.

1 22. The system according to claim 17 wherein said function
2 comprises definition of a variable.

1 23. The system according to claim 17 wherein said function is
2 simulation environment criteria.

1 24. The system according to claim 17 wherein said function is
2 specification of type.

1 25. A system for assisting a user in editing a program wherein
2 said programming environment supports special comment language to
3 augment functionality of a program language architecture, the
4 system comprising:

5 means for analyzing in a program listing, a programming
6 statement entered by said user to determine if an optional
7 special comment language function exists for said programming
8 statement;

9 means for determining if said optional special comment
10 language function should be added to said program listing; and,
11 means for adding said optional special comment to said
12 program listing.

1 26. The system according to claim 25 wherein said determining
2 means further comprises means for displaying a representation of
3 said optional special comment language function to allow said
4 user to select a special comment indicating said special
5 language function to be added said program listing.

1 27. The system according to claim 26 wherein said displaying
2 means comprises a separate window concurrently displayed with a
3 previous window.

28. The system according to claim 26 further comprising means
for selectively displaying a help assistant message for said
representation of said optional special comment language
function.

29. The system according to claim 26 wherein said representation
of said optional special comment language function comprises a
graphical image.

1 30. The system according to claim 25 further comprising means
2 for highlighting a portion of said program listing wherein said
3 portion comprises said programming statement.

1 31. The system according to claim 25 wherein said analyzing means
2 further comprises means for analyzing the context of said
3 programming statement in relationship to said program listing.

1 32. The system according to claim 25 wherein said optional
2 special comment comprises a specification of type.

1 33. A computer program product comprising a computer useable
2 medium having computer readable program code means therein in a
3 computing system for using special comment language to augment
4 functionality of a program language architecture, the computer
5 readable program code means in said computer program product
6 comprising:

7 computer readable program means for reading from a storage
8 media, a program listing for performing a basic function in a
9 first executer;

10 computer readable program means for detecting in said
11 program listing, a special comment identifier by analyzing a
12 standard comment statement in said program listing;

13 computer readable program means for interpreting contents of
14 said standard comment statement as a special comment language
15 statement when said special comment identifier is detected in
16 said standard comment statement; and,

17 computer readable program means for performing said basic
18 function and an optional function according to said special
19 comment language statement in a second executer.

1 34. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a predetermined field
3 left justified in a standard comment format.

1 35. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a predetermined field
3 right justified in a standard comment format.

1 36. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a physical location in
3 said program listing.

1 37. The computer program product according to claim 33 wherein
2 said special comment language statement is context sensitive.

1 38. The computer program product according to claim 33 wherein
2 said function comprises definition of a variable.

1 39. The computer program product according to claim 33 wherein
2 said function is simulation environment criteria.

1 40. The computer program product according to claim 33 wherein
2 said function is specification of type.

1 41. A computer program product comprising a computer useable
2 medium having computer readable program code means therein in a
3 computing system for assisting a user in editing a program
4 wherein said programming environment supports special comment
5 language to augment functionality of a program language
6 architecture, the computer readable program code means in said
7 computer program product comprising:

8 computer readable program code means for analyzing in a
9 program listing, a programming statement entered by said user to
10 determine if an optional special comment language function exists
11 for said programming statement;

12 computer readable program code means for determining if said
13 optional special comment language function should be added to
14 said program listing; and,

15 computer readable program code means for adding said
16 optional special comment to said program listing.

1 42. The computer program product according to claim 41 wherein
2 said determining means further comprises means for displaying a
3 representation of said optional special comment language function
4 to allow said user to select a special comment indicating said
5 special language function to be added said program listing.

1 43. The computer program product according to claim 42 wherein
2 said displaying means comprises a separate window concurrently
3 displayed with a previous window.

1 44. The computer program product according to claim 42 further
2 comprising means for selectively displaying a help assistant
3 message for said representation of said optional special comment
4 language function.

1 45. The computer program product according to claim 42 wherein
2 said representation of said optional special comment language
3 function comprises a graphical image.

1 46. The computer program product according to claim 41 further
2 comprising means for highlighting a portion of said program
3 listing wherein said portion comprises said programming
4 statement.

1 47. The computer program product according to claim 41 wherein
2 said analyzing means further comprises means for analyzing the
3 context of said programming statement in relationship to said
4 program listing.

1 48. The computer program product according to claim 41 wherein
2 said optional special comment comprises a specification of type.

49. A system for performing a basic function according to statements in a program listing and an optional function according to special comments in the program listing wherein the optional function is not required for performing the basic function, the system comprising:

a storage media;

a computer processor, connected to said storage media;

a program listing stored in said storage media comprising

said program statements for performing said basic function and
said special comment for performing said optional function; and

an execute program in said computer processor performing

said basic function and said optional function according to said statements and special comment.